IN THE CLAIMS

The following is a complete listing of the claims. This listing replaces all earlier versions and listings of the claims.

Claim 1 (previously presented): An information processing apparatus for generating printing data to be transmitted to a printing apparatus, comprising:

spool means for temporarily storing data to be printed in an intermediate-code format with print setting information designated via a user interface by a printer driver, wherein the data to be printed is generated by an application program and said spool means stores a plurality of print jobs;

setting-information obtaining means for obtaining the print setting information from the data temporarily stored in said spool means in the intermediate-code format;

display control means for controlling to display a user interface for editing print setting information of a print job generated by combining the plurality of print jobs stored in said spool means;

setting edit means for relating the print setting information of the print job generated by combining the plurality of print jobs and edited by the user interface to the data of the plurality of print jobs stored in the intermediate-code format and for temporarily storing them; and

print job generation means for generating a combined print job described in a page description language based on the data of the plurality of print jobs

stored in said spool means in the intermediate-code format and the edited print setting information,

wherein said display control means controls to restrict print setting items which cannot be edited as part of the combined job and to display the other print setting items as available print setting items which can be edited as part of the combined job, and

wherein a default value of the available print setting items is a display value of the print setting information which can be edited.

Claim 2 (canceled)

Claim 3 (previously presented): An information processing apparatus according to claim 1, wherein said display control means controls such that a second user interface for editing layout settings of each combined job is displayed, wherein the editing layout settings are print settings in which editing is restricted.

Claim 4 (previously presented): An information processing apparatus according to claim 1, wherein the print settings for which editing is restricted by said display control means includes print settings related to printing quality.

Claim 5 (previously presented): An information processing apparatus according to claim 1, further comprising restriction obtaining means for obtaining restriction information of the print settings,

wherein said display control means restricts a change in the print

settings, which can be edited by the user interface, according to the restriction information.

Claim 6 (previously presented): An information processing apparatus

according to claim 1, further comprising printing-data generation means for generating

printing data to be transmitted to the printing apparatus, according to the data temporarily

stored in said spool means in the intermediate-code format.

Claim 7 (previously presented): An information processing apparatus

according to claim 6, further comprising:

first printing instruction generation means for converting the data

temporarily stored in said spool means in the intermediate-code format into first printing

instructions which can be interpreted by an operating system description means for

outputting second printing instructions; and

printing-instruction allocation means for communicating a second

printing instruction received from the application program through the operating system

description means to said spool means, and for communicating a second printing

instruction received from said first printing instruction generation means through the

operating system description means to said printing-data generation means.

Claim 8 (previously presented): An information processing apparatus

according to claim 7, wherein the first printing instructions are graphic device interface

functions, the second printing instructions are device-driver-interface functions, and the printing data is written in a printer language.

Claim 9 (previously presented): An information processing method for generating printing data to be transmitted from an information processing apparatus to a printing apparatus, said method comprising:

an intermediate-data conversion step, of converting data to be printed into data having an intermediate-code format with print setting information designated via a user interface by a printer driver and temporarily storing the converted data in spool means, the data to be printed being generated by an application program and the spool means stores a plurality of print jobs;

a setting-information obtaining step, of obtaining the print setting information from the data temporarily stored in the spool means in the intermediate-code format;

a display control step, of controlling to display a user interface for editing print setting information of a print job generated by combining the plurality of print jobs stored in the spool means;

a setting edit step, of relating the print setting information of the print job generated by combining the plurality of print jobs and edited by the user interface to the data of the plurality of print jobs stored in the intermediate-code format and of temporarily storing them; and

a print job generation step, of generating a combined print job described in a page description language based on the data of the plurality of print jobs

stored in the spool means in the intermediate-code format and the edited print setting information,

wherein said display control step includes controlling to restrict print setting items which cannot be edited as part of the combined job and to display the other print setting items as available print setting items which can be edited as part of the combined job, and

wherein a default value of the available print setting items is a display value of the print setting information which can be edited.

Claim 10 (canceled)

Claim 11 (previously presented): An information processing method according to claim 9, wherein said display control step controls such that a second user interface for editing layout settings of each combined job is displayed, wherein the editing layout settings are print settings in which editing is restricted.

Claim 12 (previously presented): An information processing method according to claim 9, wherein the print settings for which editing is restricted in said display control step includes print settings related to printing quality.

Claim 13 (previously presented): An information processing method according to claim 9, further comprising a restriction obtaining step, of obtaining restriction information of the print settings,

wherein said display control step restricts a change in the print settings, which can be edited by the user interface, according to the restriction information.

Claim 14 (previously presented): An information processing method according to claim 9, further comprising a printing-data generation step of generating printing data to be transmitted to the printing apparatus, according to the data temporarily stored in the intermediate-code format.

Claim 15 (previously presented): An information processing method according to claim 14, further comprising:

a first printing instruction generation step, of converting the data temporarily stored in the intermediate-code format into first printing instructions which can be interpreted by an operating system description means for outputting second printing instructions; and

a printing-instruction allocation step, of communicating a second printing instruction received from the application program through the operating system description means to the information processing apparatus spool means, and of communicating the first printing instruction generated in said first printing instruction generation step through the operating system description means to the information processing apparatus printing-data generation means.

Claim 16 (previously presented): An information processing method according to claim 15, wherein the first printing instructions are graphic device interface

functions, the second printing instructions are device-driver-interface functions, and the printing data is written in a printer language.

Claim 17 (previously presented): A computer-executable program for executing a method for generating printing data to be transmitted form an information processing apparatus to a printing apparatus, said program comprising:

code for an intermediate-data conversion step, of converting data to be printed into data having an intermediate-code format with print setting information designated via a user interface by a printer driver and temporarily storing the converted data in spool means, the data to be printed being generated by an application program and the spool means stores a plurality of print jobs;

code for a setting-information obtaining step, of obtaining the print setting information from the data temporarily stored in the spool means in the intermediate-code format;

code for a display control step, of controlling to display a user interface for editing print setting information of a print job generated by combining the plurality of print jobs stored in the spools means;

code for a setting edit step, of relating the print setting information of the print job generated by combining the plurality of print jobs and edited by the user interface to the data of the plurality of print jobs stored in the intermediate-code format and of temporarily storing them; and

code for a print job generation step, of generating a combined print job described in a page description language based on the data of the plurality of print jobs

stored in the spool means in the intermediate-code format and the edited print setting information,

wherein said display control code controls to restrict print setting items which cannot be edited as part of the combined job and to display the other print setting items as available print setting items which can be edited as part of the combined job, and

wherein a default value of the available print setting items is a display value of the print setting information which can be edited.

Claim 18 (canceled)

Claim 19 (previously presented): A computer-executable program according to claim 17, wherein said display control step controls such that a second user interface for editing layout settings of each combined job is displayed, wherein the editing layout settings are print settings in which editing is restricted.

Claim 20 (previously presented): A computer-executable program according to claim 17, wherein the print settings for which editing is restricted by said display control program code includes print settings related to printing quality.

Claim 21 (previously presented): A computer-executable program according to claim 17, further comprising code for a restriction obtaining step, of obtaining restriction information of the print settings,

wherein said display control step restricts a change in the print

settings, which can be edited by the user interface, according to the restriction information.

Claim 22 (previously presented): A computer-executable program

according to claim 17, further comprising a printing-data generation program code of

generating printing data to be transmitted to the printing apparatus, according to the data

temporarily stored in the intermediate-code format.

Claim 23 (previously presented): A computer-executable program

according to claim 22, further comprising:

code for a first printing instruction generation step, of converting the

data temporarily stored in the intermediate-code format into first printing instructions

which can be interpreted by an operating system description means for outputting second

printing instructions; and

code for a printing-instruction allocation step, of communicating a

second printing instruction received from the application program through the operating

system description means to the information processing apparatus spool means, and of

communicating the first printing instruction in said first printing instruction generation step

through the operating system description means to the information processing apparatus

printing-data generation means.

Claim 24 (previously presented): A computer-executable program

according to claim 23, wherein the first printing instructions are graphic device interface

functions, the second printing instructions are device-driver-interface functions, and the printing data is written in a printer language.

Claim 25 (previously presented): A storage medium for storing a computer-readable program for executing a method of generating printing data to be transmitted from an information processing apparatus to a printing apparatus, said program comprising:

code for an intermediate-data conversion step, of converting data to be printed into data having an intermediate-code format with print setting information designated via a user interface by a printer driver and temporarily storing the converted data in spool means, the data to be printed being generated by an application program and the spool means stores a plurality of print jobs;

code for a setting-information obtaining step, of obtaining the print setting information from the data temporarily stored in the spool means in the intermediate-code format;

code for a display control step, of controlling to display a user interface for editing print setting information of a print job generated by combining the plurality of print jobs stored in the spools means;

code for a setting edit step, of relating the print setting information of the print job generated by combining the plurality of print jobs and edited by the user interface to the data of the plurality of print jobs stored in the intermediate-code format and of temporarily storing them; and

code for a print job generation step, of generating a combined print job described in a page description language based on the data of the plurality of print jobs stored in the spool means in the intermediate-code format and the edited print setting information,

wherein said display control code controls to restrict print setting items which cannot be edited as part of the combined job and to display the other print setting items as available print setting items which can be edited as part of the combined job, and

wherein a default value of the available print setting items is a display value of the print setting information which can be edited.

Claim 26 (new): An information processing apparatus according to claim 1, wherein when editing print setting information of the combined print job, said display control means displays a setting relating to a layout as the setting item, which cannot be edited, in the user interface by restricting editing in the case of not applying the layout, and

when editing the print setting information of a single print job stored in said spool means, said display control means displays the setting relating to the layout as the item which can be edited in the user interface.

Claim 27 (new): An information processing method according to claim 9, wherein when editing print setting information of the combined print job, said display control step displays a setting relating to a layout as the setting item, which cannot be edited, in the user interface by restricting editing in the case of not applying the layout, and

when editing the print setting information of a single print job stored in the spool means, said display control step displays the setting relating to the layout as the item which can be edited in the user interface.

Claim 28 (new): An computer-executable program according to claim 17, wherein when editing print setting information of the combined print job, said code for a display control step displays a setting relating to a layout as the setting item, which cannot be edited, in the user interface by restricting editing in the case of not applying the layout, and

when editing the print setting information of a single print job stored in the spool means, said code for a display control step displays the setting relating to the layout as the item which can be edited in the user interface.